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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,880	08/16/2005	Harald Schrott		4959

7590
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EXAMINER

CECIL, TERRY K

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

04/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/509,880

Applicant(s)

SCHROTT ET AL.

Examiner

Mr. Terry K. Cecil

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Interview Summary

1. In December 2008, attorney W. Breneman requested an in-person interview. However, because of conflicting work schedules (of both the Examiner and the aforementioned attorney), the Examiner proposed a telephone interview and requested a proposed amendment to claim 1 to be discussed (the proposed claim 1 was the same as that filed 12-29-2008) which was faxed to the examiner on 12-15-2009. On December 23, 2008, the telephone interview occurred. The Examiner pointed out that Oikama taught at least one conductance sensor 31 that penetrated the wall of the cartridge and did not contact the filter medium. The Examiner also pointed out that the control unit is considered to be replaceable since it may be disposed of along with the filter cartridge. The examiner suggested Applicant claim that the penetrating conductance sensor is replaceably removable from the filter cartridge [wall]. (It is noted that Applicant did not adopt the Examiner's suggestion in the amendment that was filed.)

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are indefinite because of the following reasons:

- The following terms lack antecedent basis: "the top wall" (claim 3).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

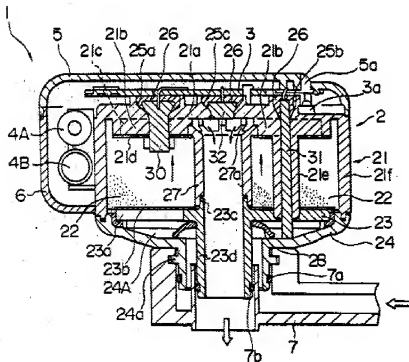
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7 and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by

Oikawa et al. (U.S. 5,281,330).



Oikawa teaches a water filter cartridge 21 including a control unit having a circuit board 3 and three conductance sensor electrodes 30, 31, and 32 the penetrate the top wall of the cartridge, wherein 32 measures the conductance of filtered water and 31 measures unfiltered water. Sensor 31 is considered to be needle-shaped and neither of sensors 31 and 32 contact the filtering medium [as in claims 1-2 and 5]. The sensors project into the housing in corresponding passages [as in claim 4]. The circuit board is the electronic evaluation unit further connected to a “display” LED 3a [as in claims 6 and 10]. Sensors 31 and 32 are used to detect whether water is flowing through the filter (**the sensed filter condition**) [as in claim 7]. The grooves in the housing and the epoxy 26 is considered to be the broadly claimed catch fastening elements [as in claims 11-12]. The epoxy is also considered to be the elastic sealing material [as in claim 14]. As for claim 13, the filter cartridge can be attached to a water faucet (col. 2, lines 30-21). As for claim 3, the limitation that the sensor penetrates through the filter cartridge wall by “puncturing” through the top wall is a product-by-process limitation that doesn't structurally distinguish the claimed invention from the prior art, i.e. regardless of how the electrode is made to extend through the housing wall, the result is still the same (e.g. as shown in figure 2 of Oikawa).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oikawa in further view of King (U.S. 4,587,518). King teaches an evaluation unit further including a temperature sensor. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the temperature sensor of King in the sensing unit in Oikawa since King teaches the benefit of temperature-corrected signals for increased accuracy of conductance measurement.

8. Claims 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oikawa in view of Joung et al. (U.S. 5,820,765). Joung teaches an evaluation unit including a timer and comparing water quality using two conductance sensors (see whole document). It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the evaluation unit of Oikawa to include a timer and also be able to compare readings from

the conductance sensors as in Joung, since Joung teaches the benefit of accurately determining the filter condition and when the filter cartridge should be replaced.

Response to Arguments

9. Applicant's arguments filed 12-29-2008 have been fully considered but they are not persuasive.

- As discussed during the interview, naming the control unit “replaceable” is not the same as claiming that the control unit is replaceably removable from the filter cartridge.
- An apparatus invention must be *structurally* distinguished from the prior art. For this reason Applicant’s argument that Oikawa operates and functions differently than “the invention” is unconvincing.
- As explained above, Oikawa compares the conductance of filtered water with unfiltered water in order to monitor the condition of the water filter cartridge (in this case, the condition monitored is if water is flowing therethrough).
- Joung is used to show that an evaluation unit having a time element and comparing measurements from two conductive electrodes to determine filter exhaustion is obvious. The comparison and the timing element would also show if a new filter cartridge is installed.
- If Applicant intends to require the control unit to be removable from the filter cartridge, he should see MPEP 2144.04 and In re Dulberg, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961) (The claimed structure, a lipstick holder with a removable cap, was fully met by the prior art except that in the prior art the cap is “press fitted” and therefore not manually removable. The court held that “if it were considered desirable for any reason to obtain

access to the end of [the prior art's] holder to which the cap is applied, it would be obvious to make the cap removable for that purpose.”). In this case, it would have been obvious for the control unit of Oikawa to be separable from his filter housing for the purpose of repairing or replacing the control unit.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Terry K. Cecil whose telephone number is (571) 272-1138. The examiner can normally be reached on 8:00a-4:30p M-F..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Sample can be reached on (571) 272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mr. Terry K. Cecil/
Primary Examiner, Art Unit 1797

tkc